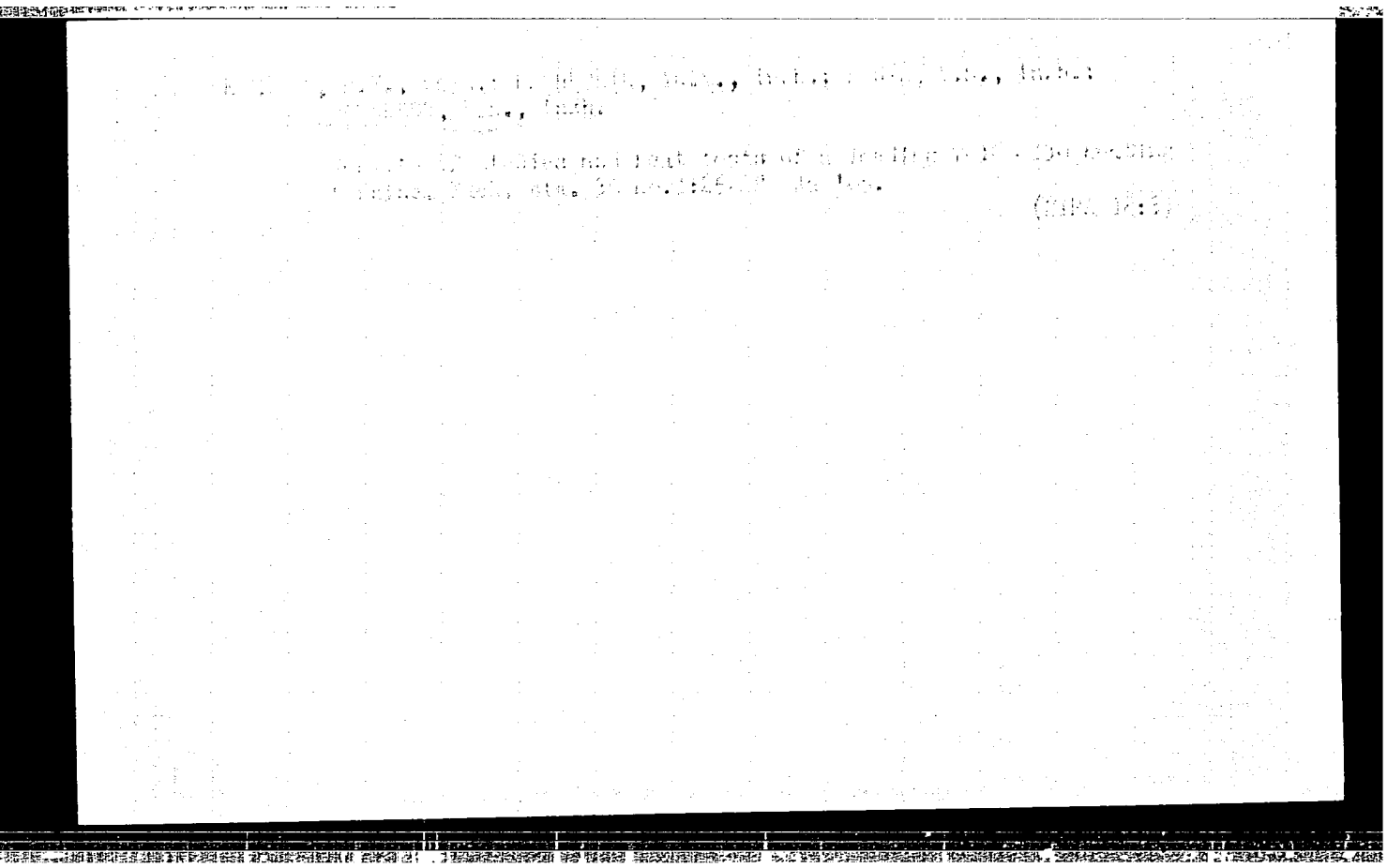
KOMAROV, N.F., inzh.; KOVETSKIY, V.M., inzh.; RUZANKOV, V.N.

Results of heat tests of the K-200-130 turbine. Teploenergetika 12 no.6:61-66 Je '65. (MIRA 18:9)

1. Vsesoyuznyy teplotekhnicheskiy institut i Vostochnyy filial Vsesoyuznogo teplotekhnicheskogo instituta, Chelyabinsk.



ACC NR: AP7007376 (N) SOURCE CODE: UR/0182/66/000/012/0021/0023

AUTHOR: Ruzanov, F. I.

ORG: None

TITLE: Testing some grades of stainless steel for hydrostatic buckling

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 12, 1966, 21-23

TOPIC TAGS: stainless steel, tensile test, tensile strength

ABSTRACT: The author gives experimental data on biaxial stretching (hydrostatic buckling) of some grades of stainless steel. The following grades and thicknesses of stainless steel were studied: Kh17T--1.0 mm, Kh25T--0.82 mm, OKh18T1--0.8 mm, Kh18N10T--0.82 mm, EP26--0.83 mm, EP177--0.92 mm. 08kp sheet steel 1.23 mm thick was also tested for comparison. The following parameters were measured during tests for hydrostatic buckling: the variation in thickness at the pole, the height of the elongated lune and the pressure and curvature at the pole of the lune. The resultant data were used for plotting curves showing stresses at the pole of the lune as a function of deformations in the polar region. Strength and ductility factors are tabulated. The results show greatest strength for Kh18N10T and EP26 steel and lowest strength for 08kp steel. Preparation of the specimen for this type of testing is simpler and less expensive than in the case of uniaxial tensile testing since shearing is the only pro-

Card 1/2 UDC: 621.7.01

ACC NR: AP7007376

cess involved. The testing equipment is simpler and higher degrees of deformation may be achieved than in uniaxial testing. Hydrostatic buckling tests of materials with normal anisotropy may be used for determining the ratio between stresses and deformations with respect to thickness. Orig. art. has: 2 figures, 1 table, 8 formulas.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 004

Card 2/2

RUZANOV, G. [Ruzanov, H.]; BUT'KO, O., red.; MATSKOVSKIY, A. [Matskovs'kyi, A.], tekhn.red.

[Industry, transportation, and communication in Chernigov Province during forty years of the Soviet regime] Promyslovist', transport i zv'iazok Chernihivshchyny za 40 rokiv Radians'koi vlady. Chernihiv, To-vo dlia poshyrennia polit. i nauk, znan' URSR, Chernihivs'ke obl. viddilennia, 1957. 30 p. (MIRA 11:6)

(Chernigov Province--Economic conditions)

RUZANOV, G., Eng. Cap Thrid Rand.

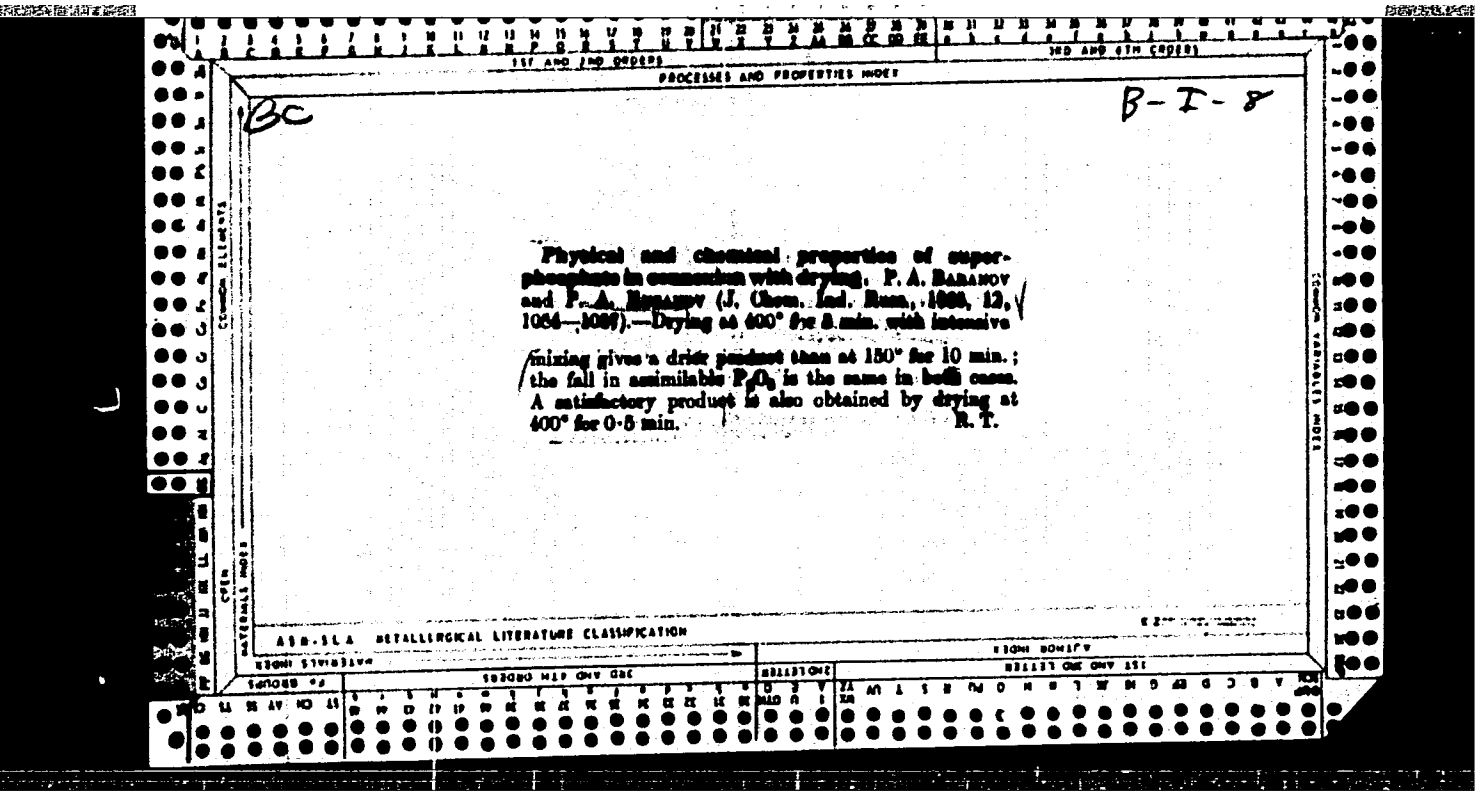
"Radiovision on the Sea," from the book Modern Military Technology, 1956, page 165.

Translation 1114505

RUZANOV, G.

"Radiolocation on the Sea," (Radiovideniye na More), Red Star No 240, 9 Oct 54

Summary - D 137213, 22 Dec 54



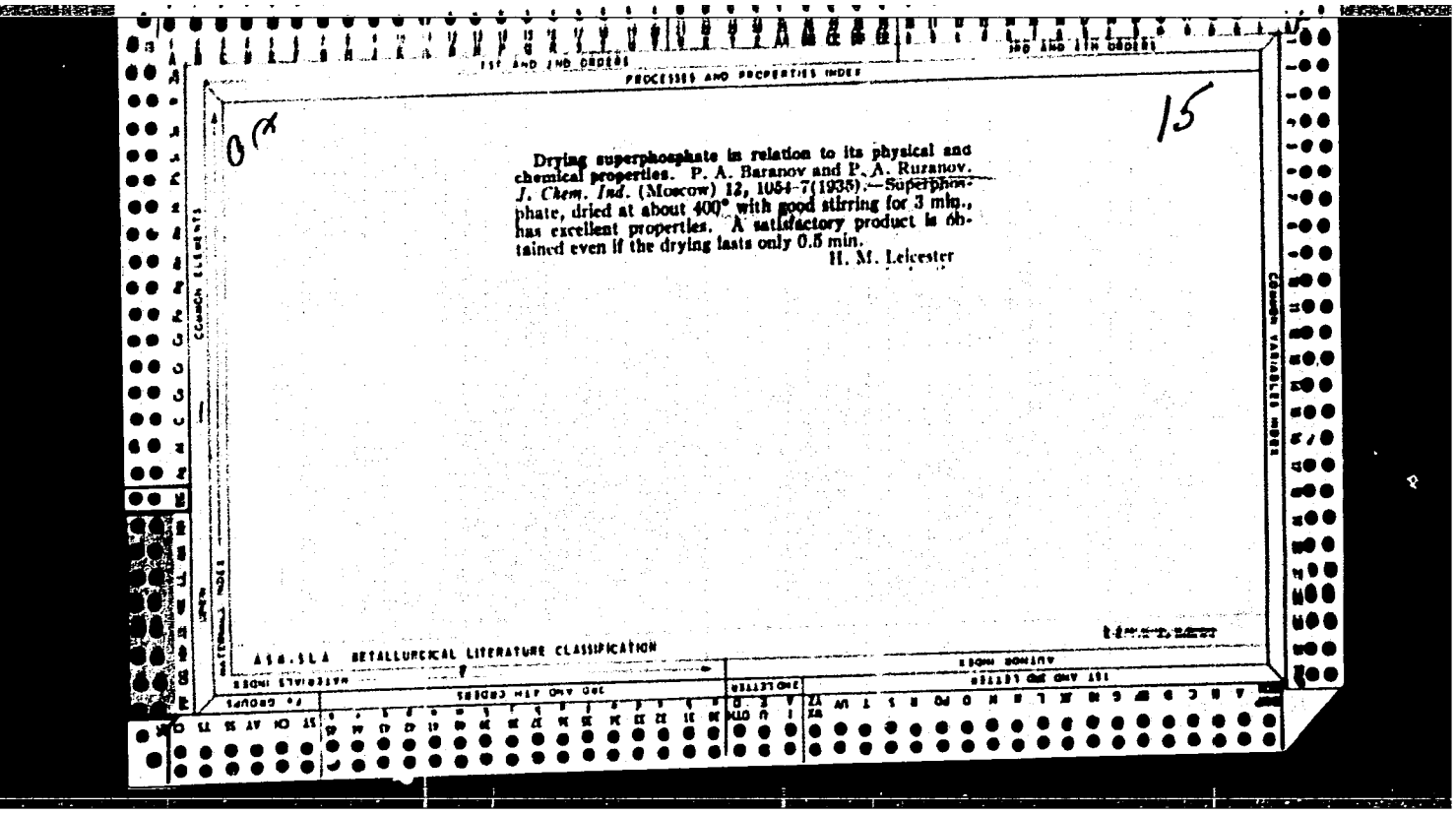
PROCESSES AND PROPERTIES INDEX

Bc

B-I-8

Physical and chemical properties of superphosphate in connection with drying. P. A. Baranov and P. A. Rinaanov (J. Chem. Ind. Russ., 1938, 12, 1064—1066).—Drying at 400° for 5 min. with intensive mixing gives a drier product than at 150° for 10 min.; the fall in assimilable P_2O_5 is the same in both cases. A satisfactory product is also obtained by drying at 400° for 0·5 min. R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Drying superphosphate in relation to its physical and chemical properties. P. A. Baranov and P. A. Ruzanov. *J. Chem. Ind.* (Moscow) 12, 1054–7(1935).—Superphosphate, dried at about 400° with good stirring for 3 min., has excellent properties. A satisfactory product is obtained even if the drying lasts only 0.5 min.
H. M. Leicester

L 34742-66 EWT(m)/EWP(k)/EWP(t)/ETI IJP(c) JD/HW
ACC NR: AP6025217 SOURCE CODE: UR/0380/66/000/002/0121/0127

AUTHOR: Ruzanov, F. I. (Moscow); Miranskaya, Ye. D. (Moscow)

ORG: none

TITLE: Influence of initial anisotropy and hardening in plastic deformation processes with thin sheet steel

SOURCE: Mashinovedeniye, no. 2, 1966, 121-127

TOPIC TAGS: motor vehicle, sheet metal, plastic deformation, plastic strength, tensile test, ultimate strength, metal drawing/Moskvich-407 motor vehicle

ABSTRACT: A study of the influence of initial anisotropy on the stress-deformed state created by drawing of complex-shaped parts. Formulas are first presented which allow the results of standard tensile tests to be applied to the sheets of metal from which the tensile test specimens were cut at various angles to the original rolling angle for determination of such properties as yield point and ultimate strength. The predictions thus produced were checked against results of actual stamping of the oil pan and central beam of the Moskvich-407 automobile from 1 and 1.5 mm thick sheet steel respectively. Before stamping, 10 mm diameter circles were applied to the surface of the metal, with straight lines drawn parallel and perpendicular to the original rolling axis of the metal. This allowed a determinatinn of stress axes in relation to original rolling axes. The results, presented in tabular form, showed that consideration of the anisotropy of the original sheet is necessary in complex-form deep drawing operations. Orig. art. has: 5 figures, 2 formulas and 4 tables. [JPRS: 35,995]

SUB CODE: 20, 11, 13 / SUBM DATE: 20Jul65 / ORIG REF: 005 / OTH REF: 001

Card 1/1 UDC: 621.983.001.2

RUZANOV, Ye.; ANDREYEV, V.; KOLESNICHENKO, A.

Issuing credit to collective farms. Den.i kred. 18 no.4: 56-62 Ap '60. (MIRA 13:4)

1. Upravlyayushchiy Kuybyshevskoy oblastnoy kontoroy Gosbanka (for Ruzanov). 2. Upravlyayushchiy Pavlovskim otdeleniyem Gosbanka Voronezhskoy oblasti (for Andreyev). 3. Upravlyayushchiy Nevinnomysskim otdeleniyem Gosbanka Stavropol'skogo kraya (for Kolesnichenko).

(Agricultural credit)

RUZANOV, Ye.

One must help the State Bank. Den. i kred. 16 no.6:48-50 Je '58. (MIRA 11:7)

1. Nachal'nik finansovogo otdela Kuybyshevskogo sovnarkhoza.
(Kuybyshev Province--Finance)

KUZANOV, Ye.

Results of the reorganization. Fin. SSSR 19 no.5:59-60 My '58.
(MIRA 11:6)

1. Nachal'nik finansovogo otdela Kuybyshevskogo sovnarkhoza.
(Kuybyshev Province—Finance)

L 10341-67 EWP(c)/EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v) IJP(c)

ACC NR: AP6029878 SOURCE CODE: UR/0413/66/000/015/0041/0042

40

AUTHORS: Ruzanov, Yu. N.; Kokhanov, B. T.; Skopin, V. K.

ORG: none

14 9M

TITLE: Method for tolerance self-control of time-pulse measuring devices with indication of the sign of the deviation. Class 21, No. 184295

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 41-42

TOPIC TAGS: quality control, self adaptive control, control circuit, measuring apparatus

14

ABSTRACT: This Author Certificate presents a method for tolerance self-control of time-pulse measuring devices with indication of the sign of the deviation. To produce a signal for the suitability or unsuitability of the device with negative or positive measurement error, the output signals of n-a most significant digits of the counter and the output signals of n-b most significant digits of the counter (where n is the number of digits in the output code of the device, a is the number of least significant digits of the device counter comprising the negative tolerance field of self-control, and b is the number of least significant digits of the device counter comprising the positive tolerance field of self-control) are added in preliminary (channel) summators. The signals for the sign of the tolerance field in which the device operates are taken from these summators (see Fig. 1). "Ones" should be recorded in

UDC: 681.142-523.8

Card 1/2

L 10341-67

ACC NR: AP6029878

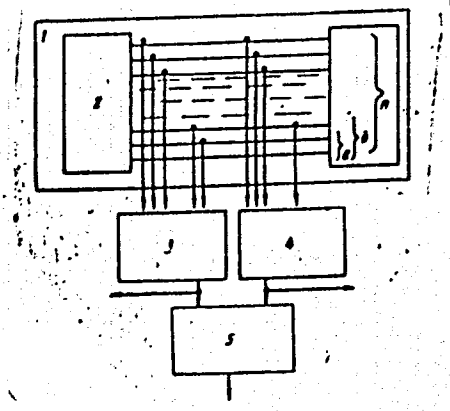


Fig. 1. 1 - measuring device; 2 - counter; 3 and 4 - summators of first and second channels; 5 - summator-analyzer

the n-a most significant digits as a result of self-control if the device is in the negative tolerance field of self-control. "Zeros" should be recorded in the n-b most significant digits if the device is in the positive tolerance field of self-control. The output signals of the channel summators are added in a summator-analyzer, and the suitability of the device is judged by the result. Orig. art. has: 1 diagram.

SUB CODE: 13,09/ SUBM DATE: 28Nov64

Card 2/2 mls

Ruzavin, I. I.

USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical Analysis. Phase Transitions. B-8

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26159

Author : A.F. Kapustinskiy, I.I. Ruzavin
Inst : Moscow Institute of Chemistry and Technology
Title : Development and Application of Relative Method of Flat Layer to Study of Aqueous Salt Systems.

Orig Pub : Tr. Mosk. khim.-teknol. in-ta, 1956, vyp. 22, 53-65

Abstract : Based on the critical review of methods of heat conductivity (H) measurements, the conclusion was arrived at that the relative method of flat layer (Christiansen C., Ann. Physik, 1881, 14, 23) was the most reliable for the determination of H of aqueous solutions of electrolytes. An installation was erected for the determination of H of aqueous salt systems, which was considerably improved in comparison with that described by Jager (Jager G., Wien, Berichte, 1890, 99(2a), 245). The heat conductivity factor K (cal/cm. sec. degree) was determined for aqueous solutions of KF,

Card : 1/2

USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical Analysis. Phase Transitions B-8

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26159

LiCl, NaCl, KCl, RbCl, CsCl, NaBr, NaI, KI, Na_2SO_4, KBr, $BeSO_4$, $CaCl_2$, $MgCl_2$, $AlCl_3$ at 25° in a wide concentration range with the accuracy of ± 0.1 to 0.2°. The earlier expressed assertions that K increased with the concentration rise (Ray W., Z. Angew. Physick, 1948, 1, 211; Spravochnik fiz.-khim. velichin, izd. "Tekhnicheskaya Entsiklopekiya", 1931, 7, 466; Bosworth T., Proc. Roy. Soc. N.S. Wales, 1948, 81, 156, 210) were disproved: K decreases with the concentration rise in all investigated solutions. It is shown that, contrarily to Jager's data, K is not a linear function of the concentration.

Card : 2/2

KAPUSTINSKIY, A.F.; RUZAVIN, I.I.

Thermal conductivity of aqueous electrolyte solutions. Part 2. Apparent molal thermal conductivities. Machanism of thermal conductivity. Zhru.fiz.khim. 30 no.3:548-555 Mr '56. (MLRA 9:8)

1. Khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva, Moskva.

(Heat conduction) (Electrolytes)

KAPUSTINSKIY, A.F.; RUZAVIN, I.I.

Thermal conductivity of aqueous solutions of electrolytes. Part 1. Experimental study of aquenous solutions of KF, LiCl, NaCl, RbCl, CsCl, NaBr, KBr, NaI, KI, Na_2SO_4, $BeSO_4$, $MgCl_2$, $CaCl_2$, $AlCl_3$. Zhur.fiz.khim. 29 no.12:2222-2229 D '55. (MLRA 9:5)

1. Khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva, Moskva.

(Electrolytes)

RUZAVIN, I. I.

Development and application of the horizontal-layer [illegible] to the study of aqueous [illegible] systems. A. P. Kapustinskii and I. I. Ruzavin. Trudy Moskov. Khim.-Tekhnol. Inst. im. D. I. Mendeleeva 1956, No. 22, 58–65.—After a crit. review of known methods for measuring the thermal cond. of aq. electrolyte solns. the construction is described of a new app. based on the method of the horizontal layer, which measures the thermal cond. of electrolytes with an error of ±[illegible] [illegible] K of thermal cond. at 25° is given for H_2O and for several concns. of KF, LiCl, NaCl, KCl, RbCl, CsCl, NaBr, KBr, NaI, KI, Na_2SO_4, $BeSO_4$, $CaCl_2$, $MgCl_2$, and $AlCl_3$. Contrary to the data of Rau (*C.A.* 43, 5655i), there was no increase in *K* with an increase in the concn. of NaCl, and similarly no increase in the case of KCl as reported by Bosworth (*C.A.* 43, 6400e). These observations disprove the conclusions of Jäger (*Wien Ber.* 99, 245(1890)), that there is a linear relation between *K* and the concn. of an electrolyte. Detailed diagrams of app., description of the method, and 33 references.
A. P. Kotloby

2
1MT
4E4j
4E3d

RUZAVIN, I.I.

Thermal conductivity of the aqueous solutions of nonelectrolytes. Nauch. dokl. vys. shkoly; khim. i khim. tekh. no.2:221-223 '58. (MIRA 11:6)

1. Predstavlena kafedroy neorganicheskoy khimii Moskovskogo khimiko-tekhnologicheskogo instituta im. D.I. Mendeleyeva.
(Solution (Chemistry))

KAPUSTINSKIY, A.F. [deceased]; RUZAVIN, I.I.

Thermal conduction of cesium iodide and the additivity of the properties of ions in solution. Trudy MKHTI no.38:47-49 '62. (MIRA 16:7)

(Solution (Chemistry)
(Cesium iodide--Thermal properties)

RUZAVIN, I.I.

Thermal conduction of glycerol and ethylene glycol aqueous solutions. Trudy MKHTI no.38:49-52 '62. (MIRA 16:7)

(Glycerol—Thermal properties)
(Ethylene glycol—Thermal properties)

5(4), 5(2)

AUTHORS: Kapustinskiy, A. F., Ruzavin, I. I. SOV/153-58-3-4/30

TITLE: Thermal and Electric Conductivity of Ionic Solutions (Teplo- i elektroprovodnost' yonnykh rastvorov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 3, pp 21 - 26 (USSR)

ABSTRACT: Whereas the electric conductivity of electrolyte solutions is explained by a thoroughly developed theory (Ref 1), there is practically no theory available explaining the thermal conductivity of ionic solutions. This might be due to the experimental difficulties as well as to the complicated mechanism. The experimental material obtained by the authors represents an advance towards the investigation of the thermal conductivity as to its relation to the electric conductivity. A survey of publications is given (Refs 1-14). As the investigation of the authors proved (Refs 15,16) the thermal conductivity coefficient (K) of the KCl solutions does not even increase in a 1-normal dilution (in

Card 1/5

contrast with Refs 11,12). Furthermore no analogy has been observed between the values K and λ (in contrast with Ref 17) for many salts. This is shown in figure 1, the left part of which presents the dependence of K on the concentration in weight %, whereas the right part of it demonstrates the same for λ (specific electric conductivity) (Ref 17). The measurement errors made by Kohlrausch (Ref 19) are due to deficiencies of his method. The arrangement made by the authors (Ref 15) permits the collection of a far more exact and comprehensive material. Thus the equivalent-thermal conductivity of several salt solutions could be computed by using the equation:

$$K_e = \frac{1000\ (K_o - K)}{S_e} \quad (1),$$

where K_e denotes the equivalent thermal conductivity, S_e the concentration of the electrolyte in equivalents per liter; K_o and K the coefficients of the thermal conductivity of pure water and of the solution. The values computed by

Card 2/5

equation (1) (according to data given in reference 15) for solutions of 12 salts are given in table 1. In spite of a certain scattering of the points (Figs 2,3) it follows both from table 1 and the figures that the equivalent thermal conductivity is in linear dependence on the square root of the equivalent concentration for all salts investigated. If the equivalent concentration s_e is substituted for $\sqrt{s_e}$ (Fig 4), the dependence mentioned is no longer valid. The electric equivalent conductivity is, according to Kohlrausch's law (Refs 18,19), also in dependence on the square root of the equivalent concentration (2). But the equivalent thermal conductivity is esentially different from the electric conductivity. The latter is always decreasing with increasing concentration, whereas the thermal conductivity decreases in some cases (e.g.KBr, KJ, CsCl) with the decreasing concentration; in some other cases (e.g. NaBr, KCl) it remains practically unvaried and, finally, in some cases (e.g.NaCl, $MgCl_2$)

increases with increasing concentration. The values of the equivalent thermal and electric conductivity of several salts in an infinite dilution were determined by extrapolation of the straight line of the dependence. There it was proved that their relation does not remain constant, which indicates the lack of an interrelation between the thermal and electric conductivity in the electrolyte solutions. There are 5 figures, 2 tables, and 20 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I.Mendeleyeva (Moscow Institute of Chemical Technology imeni D.I.Mendeleyev) Kafedra obshchey i neorganicheskoy khimii (Chair of General and Inorganic Chemistry)

Thermal and Electric Conductivity of Ionic Solutions SOV/153-58-3-4/30

SUBMITTED: October 9, 1957

Card 5/5

AUTHOR: [illegible]rin, I. [illegible]. SOV 156-58-[illegible]-5/48

TITLE: Thermal Conductivity of Aqueous Solutions of Some Non-Electrolytes (Teploprovodnost' vodnykh rastvorov nekotorykh neelektrolitov)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 2, pp. 221-223 (USSR)

ABSTRACT: The author employed the relative method of the plane layer to investigate the conductivity. His experimental equipment (Ref 6) permitted to obtain data of an accuracy of ± 0,1 - 0,2 %. He endeavored, however, to obtain much more accurate results. He measured at 25°. The concentration, given in percent by weight, was determined according to tables (Ref 7) by means of the pycnometric density. The results obtained from aqueous solutions of glucose, saccharose and urea were shown in table 1. Henceforth it can be seen that in contrast to electrolytic solutions no direct dependence of the thermal conductivity coefficient exists on the concentration given in percent by weight (Ref 1); for non-electrolytes, however, a linear dependence exists. Presumably this difference is due to electrolytic solutions whose molecules disintegrate into ions.

Card 1/3

Thermal Conductivity of Aqueous Solutions of Some Non-Electrolytes

cording to the equation $\varphi_k = \frac{(1000+mM).K-1000.K_o}{m}$ (Ref 7) the magnitudes of the quantity φ_k of the three substances are shown in table 1 and figure 1. In this case m denotes molarity, M the molar weight of the dissolved substance, K and K_o denote the thermal conductivity coefficient of the solution and of the pure solvent, respectively. Data from table 1 prove the mentioned dependence on non-electrolytes to exist. By means of extrapolation of the linear dependence of figure 1 until m = 0 the writer obtained the potential molar heat conductivity at an infinite dilution φ_k^o amounting to 0,159 for glucose, to 0,288 for saccharose and to 0,864 for urea. Table 2 shows the latter magnitudes standing in direct correlation to the molar weight of substances dissolved in water. This process seems to depend on the greater impairment of the pseudo crystalline structure of the water. It makes the water molecules more mobile. This is the case with non-electrolytes in the course of growth of the size of the molecule of the dissolved substance. There are 2 figures, 1 table, and 7 references, 5 of which are Soviet.

Card 2/3

SOV/156-58-3-5/43

Thermal Conductivity of Aqueous Solutions of Some Non-Electrolytes

ASSOCIATION: Kafedra neorganicheskoy khimii Moskovskogo khimiko-tekhnologicheskogo instituta im. D. I. Mendeleyeva
(Chair of Inorganic Chemistry of the Chemical and Technical Institute imeni D. I. Mendeleyev, Moscow)

SUBMITTED: October 7, 1957

Card 1/3

SELIVANOVA, Nadezhda Mikhaylovna; RUZAVIN, Ivan Ivanovich; [illegible], L.I., nauchn. red.; KOVAL'ZON, F.P., red.

[Inorganic chemistry] Neorganicheskaia khimiia. Moskva, Vysshaia shkola, 1965. 259 p. (MIRA 18:12)

RUZAVIN, I. I.

1339. Ruzavin, I. I. Teploprovodnost'vodnykh. Rastvorov elektro litoy
m., 1954. 8s. 22 sm. (M-vo vyssh. Obrazovaniya. SSSR.) Mosk. Ordena le
nina khim. tekh nol. In-t im d. I. Meneleeva. Kafedra obshchey i
Neogranich. Khimii i 100 ekz. B. ts. (54-53754)

SO: Knizhnaya Letopis. Vol. 1, 1955

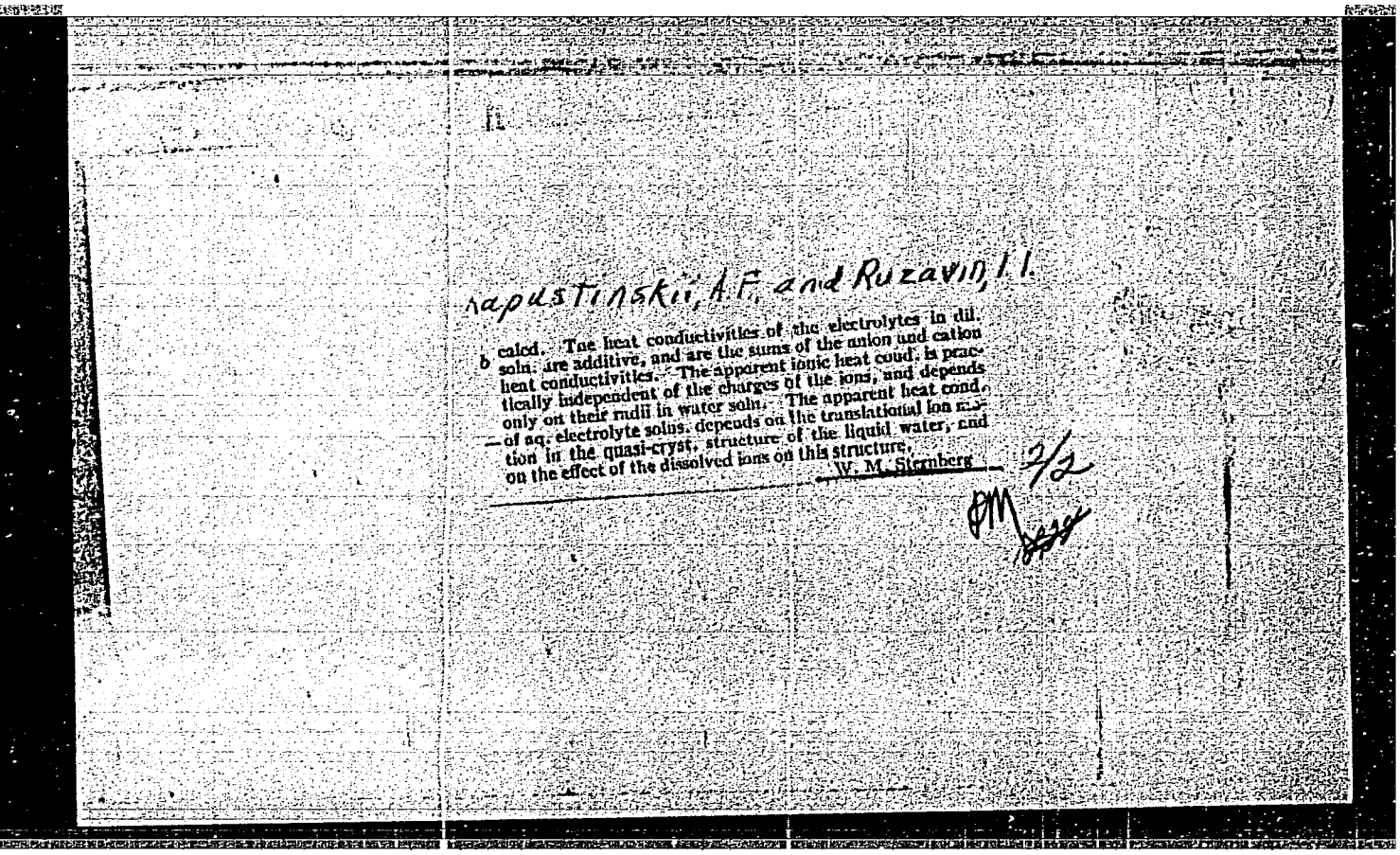
BUZAVIK, I.I.

"The Thermal Conductivity of Aqueous Solutions of Electrolytes." Cand Chem Sci, Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev, 29 Dec 54. (V., 21 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

RUZAVIN, I. I.

Heat conductivity of aqueous electrolyte solutions. I. Experimental investigation of aqueous solutions of KF, LiCl, NaCl, KCl, RbCl, CsCl, NaBr, KBr, NaI, KI, Na_2SO_4, $BeSO_4$, $MgCl_2$, $CaCl_2$, $AlCl_3$. A. F. Kapustinskii and I. I. Ruzavin (D. I. Mendeleev Inst. Chem. Technol., Moscow). *Zhur. Fiz. Khim.* 29, 2222-9(1955). —The cell consisted of 3 silvered Cu plates, 1 cm. apart. Of the 2 chambers formed, one was used to hold a standard liquid, the other the soln. investigated. The temp. was maintained to within ±0.001°. Doubly distd. and degassed water was used as a standard. The error claimed for the method is ±0.1%. Conductivities were measured within wide concn. limits. The results contradict Rau's statement (*C.A.* 43, 5655e) and Bosworth's (*C.A.* 43, 6499e) results of cond. rise of NaCl and KCl solns. with the concn. For all solns. investigated, cond. varied as a linear function of the molar concn. II. Apparent molar heat conductivities. The heat-conductivity mechanism. *Ibid.* 30, 548-55(1956). —A concept of an apparent mol. heat cond. of aq. electrolyte solns. is introduced. $\varphi_\lambda = [(1000 + mM)k - 1000k_0]/m$, where m is the mol. concn. of the solute, M its mol. wt., and k and k_0 are the heat cond. coeffs. of the soln. and the solvent. The apparent mol. heat cond. is directly related to the sq. root of the mol. concn. Based on this relation, the mol. heat conductivities at infinite dilns. were detd. for the aq. solns. of KF, LiCl, NaCl, KCl, RbCl, CsCl, NaBr, KBr, NaI, KI, Na_2SO_4, $BeSO_4$, $MgCl_2$, $CaCl_2$, and $AlCl_3$. Assuming the equality of the apparent heat conductivities of Cs^+ and I^-, the apparent heat conductivities of the individual atoms were.



Kapustinskii, A.F. and Ruzavin, I.I.

b calcd. The heat conductivities of the electrolytes in dil. solns. are additive, and are the sums of the anion and cation heat conductivities. The apparent ionic heat cond. is practically independent of the charges of the ions, and depends only on their radii in water solns. The apparent heat cond. of aq. electrolyte solns. depends on the translational ion mobility in the quasi-cryst. structure of the liquid water, and on the effect of the dissolved ions on this structure.

W. M. Sternberg

3/2

RUZAVKIN, A.A., inzh.

The guarantee of safety begins with the design. Bezop. truda v prom. 8 no.12:36 D '64. (MIRA 18:3)

1. Upravleniye Sredne-Volzhskogo okruga Gosudarstvennogo komiteta pri Sovete Ministrov RSFSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

RUZAYEV, K.S.

USSR / General and Specialized Zoology - Insects 0-7

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 23295

Author : Ruzaev, K.S., Korotkova, P.I.

Inst : Not Given

Title : Control of Pests and Diseases of Grapevines.

Orig Pub : Sad i ogorod, 1956, No 3, 78-81

Abstract : Recommendations are cited for agrotechnical and exterminating measures in controllings pests (phylloxera, grape leaf roller, grape speckler, Turkish and Crimean snout beetles, grape scale insects, larvae of cockchafer, caterpillars of various cutworm moths and mites) and diseases (mildew, fungus, white rot, cancer and grapevine chlorosis) with indices of timing, length of treatment and norms of insecticide usage.

Card : 1/1

RUZAYEV, K.S.

Materials on the bioecology of Otiorrhynchus turca Boh. [with summary in English]. Zool. zhur. 37 no.6:855-865 Je '58. (MIRA 11:7)

1. Nauchno-issledovatel'skiy institut vinogradarstva i vinodeliya RSFSR, Novocherkassk.

(Weevils)
(Black Sea region--Grapes--Diseases and pests)

LIPETSKAYA, A.D.; RUZAYEV, K.S.; SAVSDARG, V.E., red.; FEDOTOVA, A.F., tekhn.red.

[Pests and diseases of grape vines] Vrediteli i bolezni vinogradnoi lozy. Izd. 2. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 278 p. (MIRA 12:2)

(Grapes--Diseases and pests)

1. RUZAYEV, K. S.
2. USSR (600)
4. Insecticides
7. Testing a new preparation for phylloxera control, Vin. SSSR, 13, no.5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

POTAPENKO, Ye.I.; LUK'YANOV, A.D.; LAZAREVSKIY, M.A.; DYUZHEV, P.K.; ZAKHAROVA, Ye.I.; KOVALEV, A.A.; RUZAYEV, K.S.; NECHAYEV, L.N.; BASAN'KO, A.A.; MASHINSKAYA, L.P.; ALIYEV, A.M.; MANOKHIN, P.A.; LITVINOV, P.I.; KOROTKOVA, P.I.; ZAYTSEVA, Yu.F.; GRAMOTENKO, P.M.; TAIROVA, V.N., red.; PROKOF'YEVA, L.N., tekhn.red.

[Viticulture] Vinogradarstvo. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 612 p. (MIRA 14:1)

(Viticulture)

1. RUZAYEV, K. S.

2. USSR (600)

4. Phylloxera

7. Testing a new preparation for phylloxera control. Vin.SSSR 13 No. 5, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

RUZAEV, K. S.

RUZAEV, K. S. "Method of Estimating Extent of Pest Infestation and Disease Infection of Vineyards," Sad i Ogorod, no. 1, 1948, pp. 47-49. 80 Sal3

So: SIRA-SI 90-53, 15 Dec. 1953

RUZAEV, K. S.

Ruzaev, K. S., and Lipetskaya, A. Pests and Diseases of the Grape Vine in R.S.F.S.R., State Publishers of Agricultural Literature, Moscow, 1948, 112 pp. 464.05 R94

So: SIRA SI - 90-53, 15 Dec., 1953

RUZAYEV, S.N., dorozhnyy master.

On a snow-blocked section. Put' i put. khoz. no.2:16-18 F '57.
(Railroads--Snow protection and removal) (MLRA 10:4)

RUZDAK, Vladimir

Solar granulation. Zemlja i svemir 6 no.3:51-53 '63.

RUZDIC, I.

Comparative determinations of single fractions of serum proteins by precipitation methods and electrophoresis on filter paper. I. Ruždić and Z. Pučar. *Acta Pharm. Jugoslav.* 3, 130–42(1953)(English summary).—The comparison of quantities of serum fractions obtained by different pptn. methods with those obtained by electrophoresis showed a good agreement with the exception of the results obtained by the Kibrick and Blonstein method (*C.A.* 43, 4316*f*) in which the discrepancies were as high as ±4%. This could be partially explained by shorter incubation time used for pptn. 32 references. V. Mihailov

CA

11F

The enzyme activity of the tonsils. A. Sercer and I. Rukljić. *Acta Oto-Laryngol.* 36, 230-5(1948); *Abstracts World Med.* 5, 400(1948).—Diastases were detd. in blood before and after tonsillectomy. With simple hypertrophy of the tonsils, blood diastase (I) was high but was reduced after tonsillectomy. With chronically infected tonsils I was lower and did not change after the operation. The tonsils also produce enzymes hydrolyzing fats and proteins.
W. C. Tobie

CEPULIC, P.; TOMAC, V.; KUZDIC, I.

Filter paper electrophoresis in the determination of Changes in blood protein levels in schizophrenia. Neuropsihijatrija 2 no.4:221-239 1954.

1. Aus dem chemischen Laboratorium des Krankenhauses Vrapce und dem zentralen chemischen Laboratorium der Stadt Zagreb.

(SCHIZOPHRENIA, blood in,
blood protein determ. by paper electrophoresis.(Ger))
(BLOOD PROTEINS, determ.
in schizophrenia, paper electrophoresis. (Ger))
(ELECTROPHORESIS,
of blood proteins in schizophrenia, filter paper technic.(Ger))

MUKBIĆ, N.; HADŽIOSMANOVIĆ, N.; STANKOVIĆ, D.

Osseous changes of extremities in miners using vibrating tools. Med. arh. 18 no.2:37-46 Mr-Je '64.

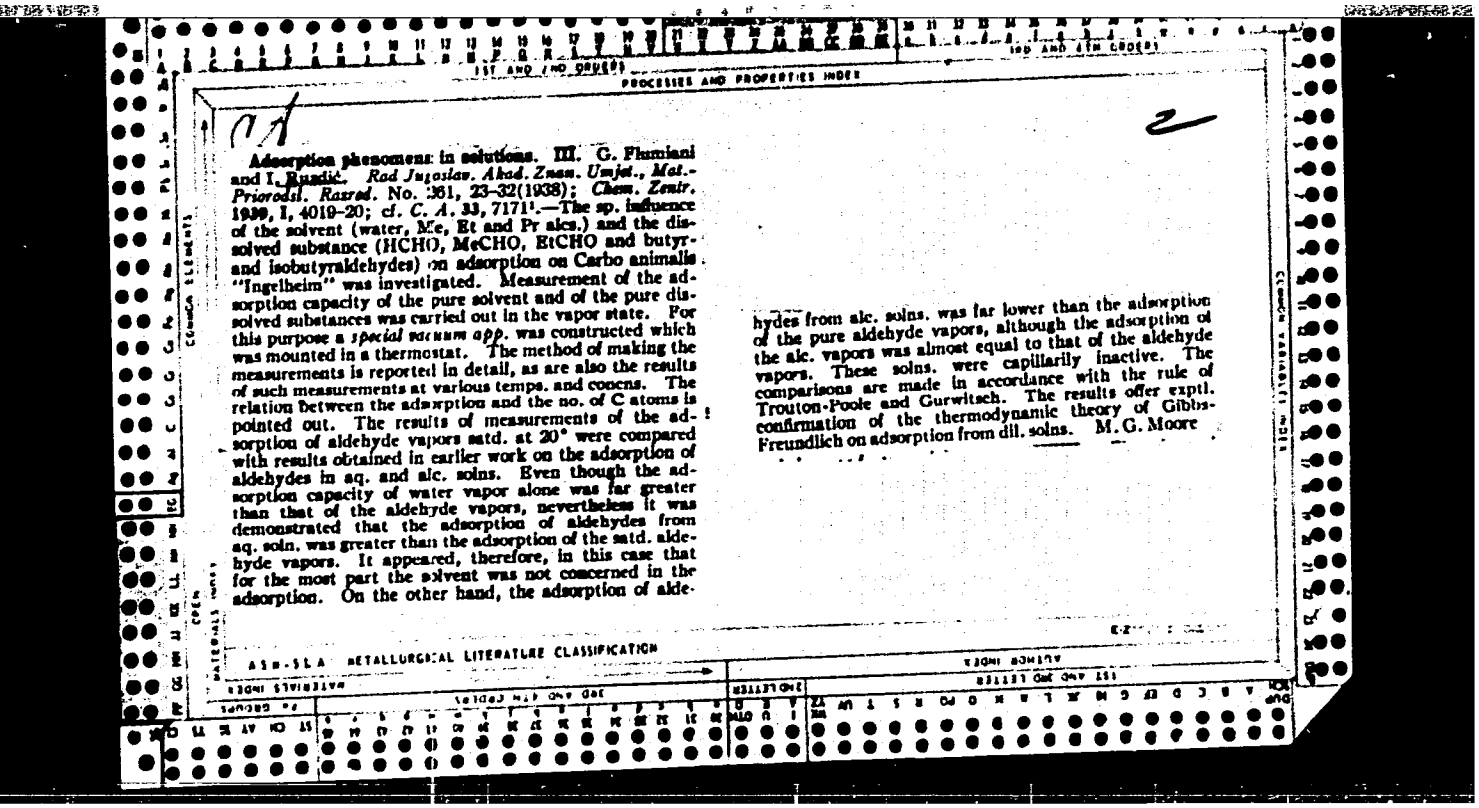
1. Institut za anatomiju i Institut za patofiziologiju Medicinskog fakulteta u Sarajevu.

Ruždić, I.

2805. The spectrometric determination of copper in serum. I. Ružđić and K. Blažević (Centr. Med.-chem. Lab., Zagreb, Yugoslavia). *Mikrochim. Acta*, 1956, (1-3), 288-298.—A direct and rapid method, with pectin as a protective colloid, for stabilising the colour of the copper diethyldithiocarbamate complex is described. *Procedure*—Mix 2 ml of serum with 6 ml of H_2O in a centrifuge tube and centrifuge with 2 ml of 20 per cent. trichloroacetic acid. Place the tube in a water bath at 90° to 95° C for 10 min. Cool to room temperature and filter. Transfer 5 ml of clear filtrate to a test glass calibrated at 15 ml. Add 1 ml of a satd. soln. of sodium pyrophosphate, 2 ml of aq. NH_3, 1 ml of 0·05 per cent. pectin soln. and 1 ml of 0·2 per cent. Na diethyldithiocarbamate, and dilute to the mark with H_2O. Measure the extinction in a Zeiss spectrophotometer at 440 mμ in a 3-cm cell. An adaptation of the method for a 1-ml sample of serum is also described. Stringent precautions against contamination of Cu from reagents and glassware are essential. Statistical treatment of results obtained shows that whilst the extinction values observed in aqueous and serum soln. are significantly different, the differences are unimportant. The lower limit of determination of Cu is 2·5 μg per ml, with an error up to 4 per cent. of the content at 99·9 per cent. confidence limits.

D. F. PHILLIPS

Chem 2
Med



PROCESSES AND PROPERTIES INDEX

Adsorption phenomena in solutions. III. G. Flumiani and I. Ruadić. *Rad Jugoslav. Akad. Znan. Umjet., Mat.-Prirodosl. Razred.* No. 261, 23-32(1938); *Chem. Zentr.* 1939, I, 4019-20; cf. *C. A.* 33, 7171¹.—The sp. influence of the solvent (water, Me, Et and Pr alcs.) and the dissolved substance (HCHO, MeCHO, EtCHO and butyr- and isobutyraldehydes) on adsorption on Carbo animalis "Ingelheim" was investigated. Measurement of the adsorption capacity of the pure solvent and of the pure dissolved substances was carried out in the vapor state. For this purpose a *special vacuum app.* was constructed which was mounted in a thermostat. The method of making the measurements is reported in detail, as are also the results of such measurements at various temps. and concns. The relation between the adsorption and the no. of C atoms is pointed out. The results of measurements of the adsorption of aldehyde vapors satd. at 20° were compared with results obtained in earlier work on the adsorption of aldehydes in aq. and alc. solns. Even though the adsorption capacity of water vapor alone was far greater than that of the aldehyde vapors, nevertheless it was demonstrated that the adsorption of aldehydes from aq. soln. was greater than the adsorption of the satd. aldehyde vapors. It appeared, therefore, in this case that for the most part the solvent was not concerned in the adsorption. On the other hand, the adsorption of aldehydes from alc. solns. was far lower than the adsorption of the pure aldehyde vapors, although the adsorption of the alc. vapors was almost equal to that of the aldehyde vapors. These solns. were capillarily inactive. The comparisons are made in accordance with the rule of Trouton-Poole and Gurwitsch. The results offer exptl. confirmation of the thermodynamic theory of Gibbs-Freundlich on adsorption from dil. solns. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

13

Determining the presence of dangerous absorption of some industrial poisons. Ibrahim Rukdić (Inst. Ind. Hyg., Zagreb, Yugoslavia). *Arhiv Hig. Rada* 1, 450-75(1950). Tests are described to det. the presence of Pb, benzene, and Hg in persons exposed to these industrial poisons. A reliable test for the detection of Pb absorption is the analysis of urine. Two methods are described. One is based on the photometric detn. of the Pb deriv. of dithizone, and the other on the quant. analysis of coproporphyrin. The porphyrin test is considered simpler, faster, and more economical. It is reliable since every increase of lead absorption leads to increased excretion of coproporphyrin in the urine. The detection of benzene poisoning is based on the excretion of ester sulfates in the urine. An established relation exists between inorg. and ester sulfates excreted in the urine. Every increase in benzene absorption is reflected in an increased excretion of ester sulfates; this disturbs the established relation between inorg. and ester sulfates. The measurement of this relation is regarded as a reliable sign of an increased absorption of benzene. The biochem. method for the detection of Hg poisoning is the microcatalytic detn. of Hg in urine. The method represents a detn. of minimal quantities of Hg by catalytic acceleration of the degradation of ferrocyanide anions in the presence of Hg ions. E. I. Froelich

1951

Yugoslavia/Fitting Out of Laboratories .. Instruments, Their Theory, Construction, and Use, H

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62018

Author: Flumiani, G., Ruzdie, I., Belia, B.

Institution: None

Title: Adsorption of Saturated and Nonsaturated Vapor on Different Adsorbents

Original Periodical: Adsorbtsija na zasiteni i nezasiteni pari na razlichni adsorbenti. Godishen zb. filoz. fak. un-t Skopje, Prirodno-matem. odd., 1953, 6, No 5, 1-10; Macedonian; German resumé

Abstract: Description of a simple vacuum instrument for gravimetric determination of adsorption of saturated vapor, in contact with the liquid phase, at different pulverulent adsorbents. The instrument consists of thermostatic evaporation and adsorption vessels; the latter is connected by means of graphite- or talc-lubricated ground-joints and is readily removed for weighing, following the adsorption.

Card 1/1

DANILENKO, V.M.; RUBDVYANETSKIY, D.R.; SMIRNOV, A.A.

Ordering of ferro- and antiferromagnetic alloys. Fiz. met. i metallo-ved. 16 no.1:3-12 Jl '63. (MIRA 16:9)

1. Institut metallofiziki AN UkrSSR.
(Ferromagnetism) (Crystal lattices)

SOV/135-59-11-19/26

18(5)

AUTHORS: Ruze, D.N., and Yunger, S.V., Engineers

TITLE: Stalingrad Welders Discuss the Problems of Development and Use of Progressive Welding Methods

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 11, pp 41-42 (USSR)

ABSTRACT: In June 1959, the Stalingrad sovnarkhoz, in co-operation with the Oblast' Administration NTO of the Machine-Building and Oil Industries, convened a scientific-technical conference. 250 delegates from different organizations, Institute of Electric Welding imeni Ye.O. Paton, VNIIAVTOGEN, VNIIESO, TsNIITMASh, as well as from local institutes and vuzes participated at the conference. Deputy Chairman of the Stalingrad sovnarkhoz, A.S. Zhikharev, reported on development of welding. The volume of welding should be increased during the next 7 years by 3 times; hence the importance of mechanization and automation of welding processes. The Senior Scientific Worker at the Institute of Electric Welding imeni Ye.O. Paton, B.I. Medovar, told about the work performed at the Institute during recent years. Deputy Chief

Stalingrad Welders Discuss the Problems of Development and Use of Progressive Welding Methods

Engineer of the VNIIAVTOGEN, V.S. Chernyak, reported on the new effective methods of metal heat-treatment. Scientific Worker of VNIIESO, L.A. Shternin, reported on the new method of friction welding. Further reports were delivered by V.S. Salimon (SNIITMASh) - on carbon dioxide shielded arc welding; S.V. Yunger (SNIITMASh) - on new steels 09G2DT (M) and 16GT (3N) of a high weldability; S.A. Zandberg (Plant imeni Petrov) - on automation of welding work when building equipment used in the oil industry; Ye.I. Dragan (Stalingrad Shipyard) - on submerged arc welding applied to ship-building; Ye.B. Mlinov - on electroslag welding; V.M. Yerofeyev (Stalingrad Tractor Works) - on development of contact welding; F.A. Ratin (SNIITMASh) - on co-operation with the Institute of Electric Welding imeni Ye.O. Paton; V.P. Zimin (Plant imeni Petrov) - on production of ribbed pipes for heat-exchanging devices; P.I. Antonov - on the process of automatic surfacing of rollers used in the rolling-mills at the Plant "Krasnyy Oktyabr'"; V.P. Belousov (Plant imeni Petrov) and V.Ye. Yershov (Plant "Krasnyy

Stalingrad Welders Discuss the Problems of Development of Use of Progressive Welding Methods

Oktyabr'") - on new methods of cutting and heat-treating high-chrome steels. The Conference has proposed selecting the Welding Laboratory of the SNIITMASh as a base laboratory for the Stalingrad sovnarkhoz.

Card 3/3

RUZEK, Josef, inz., major, C.Sc.

A contribution to the calculation of the inlet port of a radial compressor. Zpravodaj VZLU no.1:15-23 '62.

RUZEK, Josef

Vibration grinding. Silikaty 7 no.1:68-82 '63.

1. Vysoka skola chemicko-technologicka, Praha, katedra technologie silikatu.

L 1036-66 EWT(l)/EPA(s)-2 IJP(c) GG

ACCESSION NR: AP5025940 CZ/0042/65/000/005/0278/0290

AUTHOR: Ruzek, Vladimir (Special assistant)

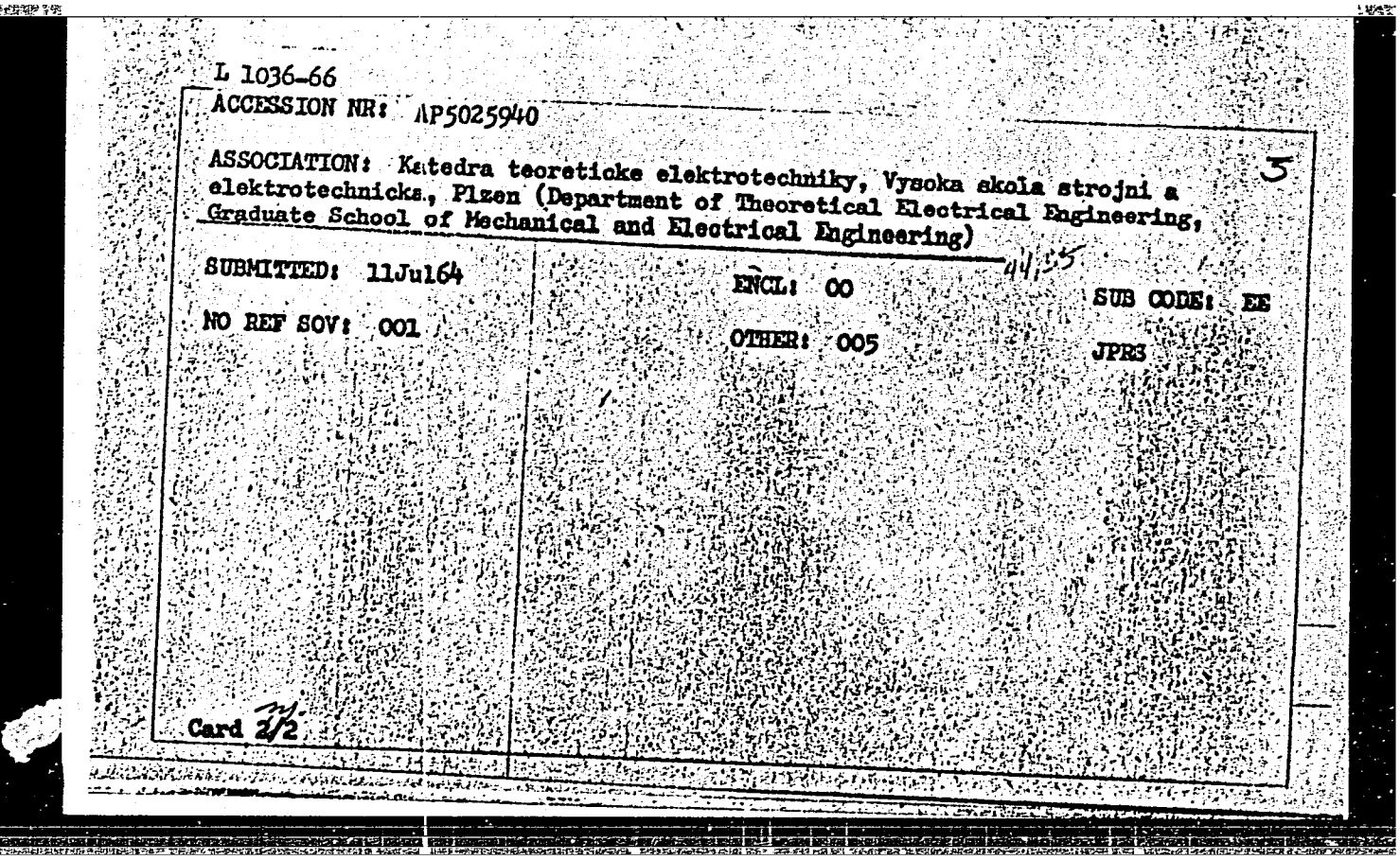
TITLE: Determination of the characteristic values of capacitance pickups of motion with plane electrodes and a variable width of the dielectric gap

SOURCE: Elektrotechnicky casopis, no. 5, 1965, 278-290

TOPIC TAGS: capacitance bridge, electric engineering, electrode, dielectrics, electric capacitance

ABSTRACT: [Author's Czech and English summaries, modified]: In the article the basic relations are derived for calculation of the characteristic values of capacitance pickups with a variable width of the dielectric gap, that is, formulas for the sensitivity, unit sensitivity and absolute and relative nonlinearity with respect to the quiescent point. Relations are derived for a capacitance pickup with an additional dielectric insert and a graphical formulation is given for its parameters. The application of the derived formulas is shown on practical examples. [Orig. art. has: 23 formulas and 6 graphs.]

Card 1/2



L 1036-66
ACCESSION NR: AP5025940

ASSOCIATION: Katedra teoreticke elektrotechniky, Vysoka skola strojni a elektrotechnicka, Plzen (Department of Theoretical Electrical Engineering, Graduate School of Mechanical and Electrical Engineering)

SUBMITTED: 11Jul64 ENCL: 00 SUB CODE: EE

NO REF SOV: 001 OTHER: 005 JPRS

Card 2/2

L 42234-66

ACC NR: AP6031565 SOURCE CODE: CZ/0039/65/026/008/0484/0486

27
B

AUTHOR: Ruzek, Vladimir (Engineer)

ORG: College of Mechanical and Electrical Engineering, Plzen (Vysoka skola strojni a elektrotechnicka)

TITLE: Graphic determination of the capacitance response in transducers with a nonhomogeneous dielectric

SOURCE: Slaboproudy obzor, v. 26, no. 8, 1965, 484-486

TOPIC TAGS: electric capacitance, dielectrics

ABSTRACT: The article describes a simple graphic method of determining the capacitance response of transducers with parallel plane electrodes and a dielectric slit of variable width. The response of the capacitive transducer can be modified and its nonlinearity can be changed by selecting an additional dielectric inlay with specified properties. The relations are derived theoretically, the normal working point of the transducer is expressed and the respective capacitance responses are derived accordingly. Orig. art. has: 3 figures and 5 formulas. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 09 / SUBM DATE: 04Feb65 / ORIG REF: 003 / SOV REF: 001
OTH REF: 003

Card 1/1

UDC: 621.319.4

0919 0350

L 41782-66

ACC NR: AP6031677 SOURCE CODE: CZ/0042/66/000/003/0179/0193

28
B

AUTHOR: Ruzek, Vladimir (Engineer; Special assistant)

ORG: Department of Theoretical Electrical Engineering, Technical Institute of Machinery and Electrical Engineering, Plzen (Katedra teoreticke elektrotechniky, Vysoka skola strojni a elektrotechnicka)

TITLE: Determination of the capacity curve of a membrane manometer and calculation of its sensitivity

SOURCE: Elektrotechnicky casopis, no. 3, 1966, 179-193

TOPIC TAGS: manometer, dielectric layer

ABSTRACT: The paper gives the capacity calculation of a sensing unit with a deformation-membrane electrode at various diameters of the solid plane electrode and the membrane. The calculation includes the influence of an additional dielectric layer of a solid dielectric in the gap between the electrodes on the curve of the capacity and the change of the range. A relation is derived for calculation of the sensitivity of the sensing unit and relations for determination of the absolute and relative non-linearity of the capacity curve. The use of the derived relations and diagrams is shown on a practical example. This paper was presented by J. Forejt. Orig. art. has: 7 figures, 16 formulas and 1 table. [Based on author's Eng. abst.] [JPRS: 36,644]

SUB CODE: 09 / SUBM DATE: 21Apr65 / ORIG REF: 004 / SOV REF: 001
OTH REF: 002

Card 1/1 UDC

L 6447-66 EWT(m)/EWA(h) DM

ACCESSION NR: AP5019804 UR/0089/65/019/001/0024/0028
543.52

AUTHOR: Labushkin, V. G.; Ruzer, L. S.

TITLE: On a method for determining the concentrations of short-lived daughter products of radon in air from the α and β radiation

SOURCE: Atomnaya energiya, v. 19, no. 1, 1965, 24-28

TOPIC TAGS: Alpha radiation, Beta radiation, radon radioactive decay, atmospheric radioactivity, half life, atmospheric contamination

ABSTRACT: The proposed method is based on measurement of the α and β activities of a filter through which air containing RaA, RaB, and RaC is drawn. The two activities of the daughter products are measured simultaneously by means of a spectrometric technique of increased accuracy. A thin filter (NEL or LFS used for α spectrometry), through which air is blown from a radon-containing chamber, is placed between two photomultipliers (FEU-13), one covered with stilbene and the other with CsI(Tl). The outputs of each multiplier are amplified and passed through a pulse-height analyzer. The filter readings were calibrated against a non-emanating radium source. The activities were determined by comparing the number of counts due to the filter activity with the number of counts from the radium source. Expressions are derived for the activities of RaA, RaB, and RaC in the

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L 6447-66
ACCESSION NR: AP5019804

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filter at the instant of termination of filtration from the equation for the radioactive-transformation chain and for the concentrations of these products for the case when the parent radioactive substance is long-lived. The results are compared with those obtained by E. Tsivoglou et al. (Nucleonics v. 11, no. 9, 40, 1953) and the claims of higher accuracy for the described method are briefly justified. "The authors are deeply grateful to D. M. Ziv, Ye. A. Volkova, and Yu. V. Mazurek of the Radiyevyy institut AN SSSR (Radium Institute AN SSSR) for preparing the non-emanating Ra^{226} sources." Orig. art. has: 3 figures, 3 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 03Jul64 ENCL: 00 SUB CODE:

NR REF SOV: 003 OTHER: 001

Card 2/2

RUZER, L.S.

Gamma-ray monitoring of inhaled radon. Atom. energ. 13 no.4:384-385 O '62. (MIRA 15:9)
(Gamma rays) (Radon) (Air—Pollution)

PHASE I BOOK EXPLOITATION SOV/6093

Ardashnikov, S. N., S. M. Gol'din, A. V. Nikolayev, L. S. Ruzer, and E. M. Tsenter

Zashchita ot radioaktivnykh izlucheniy (Protection From Radioactive Radiation). Moscow, Metallurgizdat, 1961. 420 p. Errata slip inserted. 5450 copies printed.

Ed. (Title page): A. V. Nikolayev, Corresponding Member, Academy of Sciences USSR; Reviewer: I. V. Petryanov-Sokolov, Corresponding Member, Academy of Sciences USSR; Ed.: M. S. Arkhangel'skaya; Tech. Ed.: M. K. Attopovich.

PURPOSE: This book is intended as a textbook for students at vuzes for mining and metallurgy and other special fields associated with the use of radioactive isotopes and radiation, and also for engineers, technical personnel, and biologists.

COVERAGE: Problems of protection from radioactive radiation are considered from the physical, chemical, and biological points of view. Industrial electronic dosimeters and methods for their

Card 1/[illegible]

use are described. Some basic principles of nuclear physics and electronics are included. The material is divided into two parts: "Physical and Biological Means of Protection From Nuclear Radiation" and "Dosimetric Measurements". Section I of the first part was written by E. M. Tsenter, Doctor of Technical Sciences. It presents a series of problems in determining dosage and the design of shielding from external irradiation. Chapters 1 to 5 of Section II, first part, were written by S. N. Ardashnikov, Candidate of Medical Sciences, and describe biological means of protection from radiation and the rules for working with radioactive substances. Chapter 6 of Section II, first part, was authored by A. V. Nikolayev; it gives numerical estimates of the danger in working with specific unshielded radioactive preparations. Some special concepts are introduced which may be useful for the study of protection from internal irradiation while working with unshielded preparations (radiovolatility, safe and suitable concentrations, etc.). Section I of the second part was written by S. M. Gol'din, Candidate of Technical Sciences, and contains fundamentals of electronics and a description of

41h01

S/089/62/013/004/010/011
B102/B108

AUTHOR: Kuzer, L. S.

TITLE: Gamma-activity monitoring during radon inhalation

PERIODICAL: Atomnaya energiya, v. 13, no. 4, 1962, 384 - 385

TEXT: Measurement of the radiation dose D absorbed by the human body is of essential importance for determining the radiation hazard. This measurement meets with considerable difficulties, especially for determining the alpha activities. Seeing that the daughter products of radon are α-, β-, and γ-active the author suggested (in Atomnaya energiya, 4, no. 2, 144, 1958 and 8, no. 6, 542, 1960) that the radiation dose due to α- and β-emitters might be determined from measurements of the activity A_γ (decays/min) of the γ-emitters of the daughter products settling in the respiratory organs. This requires a knowledge of the equilibrium constants η_A, η_B, and η_C of the daughter products Ra A, Ra B, and Ra C. Using previous results one obtains $D = A_\gamma(t)\Phi(t, \eta_{BA}, \eta_{CA})$, where $\eta_{BA} = \eta_B/\eta_A$ and $\eta_{CA} = \eta_C/\eta_A$. The function Φ is tabulated. For the particular case of air with $\eta_{BA} = 0.1$ and $\eta_{CA} = 0.01$,

Card 1/3

which is of practical importance, one obtains $D^{\alpha} = 2.1 \cdot 10^{9} \cdot A_{\gamma} \cdot t$ erg for $t > 3$ hrs. This is the approximate α-radiation dose absorbed within t hours, and A_{γ} is the activity of the gamma-emitting daughter products of radon in the respiratory organs expressed in curies. If the breathing air contains Ra A, B, and C, then A_{γ} will be about $2 \cdot 10^{-8}$ curies after more than 3 hours. This method has an error of ±15% but offers many advantages; for example, it can be used to check the activity distribution in the respiratory organs. There is 1 table.

SUBMITTED: January 2, 1962

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Gamma-activity ...

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Legend to the Table: t given in hrs; Φ expressed in terms of 10^{-4} erg·min.

η_{BA}, η_{CA}	$\Phi(t, \eta_{BA}, \eta_{CA}) \times 10^4$ эрг·мин	
	$t=3$ ч	$t=6$ ч
$\eta_{BA} = \eta_{CA} = 1$	23,8	47,8
$\eta_{BA} = \eta_{CA} = 0$	40,8	81,4
$\eta_{BA} = \eta_{CA} = 0,8$	24,2	48,2
$\eta_{BA} = \eta_{CA} = 0,6$	24,5	49,0
$\eta_{BA} = \eta_{CA} = 0,5$	24,9	49,8
$\eta_{BA} = \eta_{CA} = 0,4$	25,3	50,7
$\eta_{BA} = \eta_{CA} = 0,2$	27,2	54,5
$\eta_{BA} = \eta_{CA} = 0,1$	30,0	60,0
$\eta_{BA} = \eta_{CA} = 0,01$	38,2	75,8
$\eta_{BA}=0,8$; $\eta_{CA}=0,4$	24,5	48,8
$\eta_{BA}=0,6$; $\eta_{CA}=0,2$	25,3	50,5
$\eta_{BA}=0,2$; $\eta_{CA}=0,1$	28,2	56,3
$\eta_{BA}=0,1$; $\eta_{CA}=0,01$	32,2	64,4

Card 3/3

LEYTES, F.L.; RUZER, L.S.

Morphological and dosimetric investigations following the experimental introduction of radon water into the gastrointestinal tract. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.1:13-22 '61. (MIRA 14:5)

1. Iz radiologicheskoy laboratorii (zav. - prof. Ye.S.Shchepot'yeva) TSentral'nogo instituta kurortologii (dir. - kandidat meditsinskikh nauk G.N.Pospelova).

(DIGESTIVE ORGANS) (RADON--PHYSIOLOGICAL EFFECT)

RUZE, Mishel'

"Iskusstvennie sputniki Zemli" (Artificial earth satellites), V zashchitu mira, Vol. 4, No. 52, September, 1955, pp. 29-35.

RUZEK, J.

DISEASES OCCURING FROM WELDING ARMOUR PLATE WITH LOW ALLOY ELECTRODES. J. Ruzek, M. J. Kotera, and V. Krahulik. (Strojnicky Obzor, 1947, vol. 27, Mar., pp.139-142). (In Czech). During the war countries under German domination were compelled to use low-alloy electrodes with various coatings for welding armour plates. A basic coating permits considerable saving of chromium and manganese. While welding with these electrodes large quantities, of fluorine were involved and several welders became ill. At first chromium poisoning was suspected, but investigations showed that that was not the cause, and also that the paint was free from harmful admixtures. To find out how much fluorine is driven off during welding two German electrodes (RND and PNA) were melted down on armour plate and the solidified weld metal and one each of the unused electrodes were analysed. It was found that 0.15 g. of fluorine is evolved from each electrode, e. e., a total of 83 g./8-hr. shift. Welders working inside armoured vehicles thus underwent grave risks. Protection with respirators was found impracticable. Use of an alkali paste was found satisfactory and this was applied to the mucous membrane every 4 hr. In addition the welders were required to consume extra milk, and the ventilation was improved.

Immediate source clipping

BARTA, Rudolf, prof., inz., doktor technickych ved; RUZEK, Josef; SPICAK, Karel, inz.

Highly mullitized chamotte. Sbor chem tech no.3, part 1:501-505 '59.

1. Katedra technologie silikatu, Vysoka skola chemicko-technologicka, Praha.

[illegible]

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [illegible]

Affiliation: [illegible] of the [illegible] Institute of Stenography ([illegible] Steno [illegible]), [illegible]

Source: [illegible], Nasa Veda, Vol [illegible], No 11, Nov 61, pp [illegible].

Data: "The Twenty-fourth [illegible] Congress."

GPO 981643

RUZER, L.S.

Measurement of the doses absorbed by an organism exposed to radon and its daughter products. Atom.energ. 8 no.6:542-548 Je '60. (MIRA 13:6)
(Radiation--Dosage) (Radon--Isotopes)

RUZER, L.S.

Degree of equilibrium between short-lived decay products of radon in air. Atom.energ. 8 no.6:557-559 Je '60.
(MIRA 13:6)

(Radon--Decay) (Radioisotopes)

EXCERPTA MEDICA Sec 5 Vol 12/11 General Path, Nov 59

3313. PATHOLOGICAL-ANATOMICAL CHANGES IN INTERNAL ORGANS PRODUCED BY EXPERIMENTAL INHALATION OF RADON (Russian text) - Leites F. L. and Ruzer L. S. - ARKH. PATOL. 1959, 21/1 (20-28) Graphs 4 Tables 1 Illus. 3

The radioactive gas radon is not only produced in uranium and radium laboratories but is also used therapeutically for bath and drinking cures. The biological effect has so far been insufficiently studied, however. For this reason, experiments have been carried out in rats which were made to breathe air containing radon in toxic concentrations of 3,700-30,000 Mach units and disintegration products of radon. The animals breathed such air 2 hr. daily for one month and this caused the development not only of a typical generalized radiation disease but also of severe pulmonary lesions. These alterations manifested themselves first of all with acute pulmonary emphysema, soon afterwards associated with desquamation of the bronchial and alveolar epithelium, with subsequent transformation into panbronchitis and bronchopneumonia. The condition leads to sclerotic alterations, with obliteration of the bronchial lumen and with bronchiectasis. Metaplasia of the bronchial epithelium into a pluristratified pavement epithelium, atypical precancerous proliferations and calcification with formation of bone and cartilage could also be observed. When the air breathed contained only 100 Mach units of radon the experimentals were still free from lesions after as long as 2 yr.

Brandt - Berlin (V, 14*)

LEYTES, P.L.; RUZER, L.S. (Moskva)

Pathoanatomical changes of the internal organs following radon inhalation under experimental conditions [with summary in English]. Arkh.pat. 21 no.1:20-28 '59. (MIRA 12:1)

1. Iz radiologicheskoy laboratorii (zav. - prof. Ye.S. Shchepot'yeva) TSentral'nogo instituta kurortologii (dir. - kand. med. nauk G.N. Pospelova).
(RADIUM, effects,
radon inhalation, histopathol. of internal organs in white rats (Rus))

RUZER, L. S.

AUTHOR: Ruzer, L. S. 89-2-5/35

TITLE: A Calculation of Inhaled Radon Doses (Podschet dozy pri vdykhanii radona).

PERIODICAL: Atomnaya Energiya, 1958, Nr 2, pp. 144-148 (USSR).

ABSTRACT: The biological effects of radon and of its decay products with a short half life on the respiratory organs is caused in the first instance by the α-rays of Rn, Ra A and Ra C'.
An evaluation of the quantity of inhaled decay products may be conducted with the help of the γ-radiation of Ra B and mainly of Ra C. All these problems are of importance for industrial plants (atomic plants) as well as in nature where radon is always present. The relation between the integral absorption dose caused by the abovementioned α radiating substances and the γ-active products, which are kept back by the respiratory organs - mainly Ra C - , is deduced theoretically. The function:

$$A_\gamma = a\, q\, v_t\, \delta\left[\eta_A \xi_A(t) + \eta_B \xi_B(t) + \eta_C \xi_C(t)\right]$$

Card 1/2 is given for the γ-activity after the inhalation of radon, where the

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following notation holds:

$a = 222 \cdot 10^{10}$ decays / minute and per 1 C of active substance.

v_t = volume of air inhaled per minute.

$q = C/l$

δ = the proportion of radon remaining in the respiratory organs.

$\eta_A \eta_B \eta_C$ = equilibrium state of Ra A, Ra B, Ra C.

There are 2 figures, and 9 references, 3 of which are Slavic.

SUBMITTED: January 15, 1957,

AVAILABLE: Library of Congress.

Card 2/2 1. Radon-Physiological effects 2. Radon-Dosage determinations

S/089/60/008/06/06/021
B006/B063 82307

21.6300

AUTHOR: Ruzer, L. S.

TITLE: Determination of the Absorbed Doses of Emanation and Its Daughters Penetrating Into the Organism

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 542-548

TEXT: In a preceding paper (Ref. 3), the author examined the radiation doses of short-lived alpha emitters absorbed by inhaling radon. In the present paper, he suggests a new method for the determination of the absorbed doses of radiation emitted by radon, the short-lived beta emitters RaB and RaC, and long-lived elements of the radon series. The peculiarities to be considered in the determination of the absorbed energy are thoroughly discussed in the introduction. Next, formulas are derived for the absorbed radiation of various emitters, including an extensive formula for the determination of the integral absorbed dose of radiation from beta emitters for the case in which radon is absorbed by the organism through inhalation. The author, partly in cooperation

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with others, performed a series of experiments on rats and other animals, the results of which are also given. The theoretical considerations are supplemented by practical examples. Analogous calculations were made for the thoron and actinon series. Here, analogous relations exist between the absorbed energy (from α- and β-emitters) and the activity of the decay products (due to γ-radiation). On the basis of these calculations the author suggests new limits for the permissible concentration of thoron and actinon in the air. The above-mentioned method of determining absorbed doses may also be applied to the coincidence between the organism and elements of any decay series. It is shown that individual dosimetric analyses for the gamma radiation of daughters of emanation that has penetrated into the respiratory organs can be carried out. Moreover, the calculations given in this paper show that, if the short-lived daughters of radon in the air are in equilibrium, the absorbed dose (due to alpha emitters in the respiratory organs) exceeds the doses due to the presence of radon in the whole organism by about

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four orders of magnitude. The permissible concentration of thoron and its daughters in the air must be reduced to about the twentieth part as compared to the permissible concentration of radon. For the actinon series the permissible concentration is $\sim 5.10^{-11}$ curies/liter. Finally, the author thanks Yu. M. Shtukkenberg, N. G. Gusev, and O. I. Leypunskiy for their discussion and remarks. There are 5 figures and 8 references, 6 of which are Soviet.

SUBMITTED: September 11, 1959

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LABUSHKIN, V.G.; RUZER, L.S.

Method for determining the concentrations of shortlived daughter products of radon in the air from the alpha and beta radiations. Atom. energ. 19 no.1:24-28 Jl '65. (MIRA 18:7)

LABUSHKIN, V.G.; POLEV, N.M.; RUZER, L.S.

Determining the self-absorption of alpha rays in a sample of air being filtered. Atom. energ. 19 no.1:39 Jl '65. (MIRA 18:7)

ARDASHNIKOV, S.N., kand. med. nauk; GOL'DIN, S.M., kand. tekhn. nauk; NIKOLAYEV, A.V.; RUZER, L.S.; TSENTER, E.M., doktor tekhn. nauk; PETRYANOV-SOKOLOV, I.V., retsenzent; ARKHANGEL'SKAYA, M.S., red. izd-va; ATTOPOVICH, M.K., tekhn. red.

[Radiation protection] Zashchita ot radioaktivnykh izluchenii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 420 p. (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Nikolayev, Petryanov-Sokolov). (Radioisotopes—Safety measures) (Radiation protection)

S/089/60/008/06/12/021
B006/B063 82313

21,5300

AUTHOR: Ruzer, L. S.

TITLE: Determination of the Degrees of Equilibrium Between the Short-lived Daughters of Radon Decay in the Air

PERIODICAL: Atomnaya energiya, 1960, Vol. 8, No. 6, pp. 557-559

TEXT: It has been proved that the major part of the dose of radon absorbed by the human body through respiration stems from the short-lived decay products of radon. The degree of equilibrium between these products is usually determined by filtering the air and subsequent measurement of the alpha radiation of the filters. The content of radon is determined by measuring the ionization current in the emanation chamber. In the article under abstraction, the author suggests a method which allows the concentration of the short-lived daughters to be determined only from the ionization current in the emanation chamber. As in this case the energy of alpha particles is much higher than that of beta particles, it is only necessary to examine the

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ionization current caused by the alpha emitters RaA and RaC'. The following expression is derived for the ionization current:

$I = kqv\left[f_{Rn}(t) + \eta_A f_A(t) + \eta_B f_B(t) + \eta_C f_C(t)\right]$. η_A, η_B, η_C denote the degree of equilibrium for RaA, RaB, and RaC; q is the concentration of radon in curies/liter; v - the volume of the chamber; k - a coefficient describing the relationship between activity and current; $F_{Rn}(t)$, $f_A(t)$, $f_B(t)$, and $f_C(t)$ represent the contribution of Rn, RaA, RaB, and RaC to the current. All four functions are illustrated in Fig. 1. η may be determined by measuring the ionization current at three different times, and the values for f(t) are obtained from the diagram of Fig. 1. The function enclosed in brackets, which is denoted by F(t), is shown in Fig. 2 for different ratios of $\eta_A : \eta_B : \eta_C$. The time dependence of the equilibrium coefficients is clearly seen : At different η-ratios, the F(t) curves differ considerably during the first 60 to 80 minutes after the introduction of air into the chamber.

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When $t > 200$ min, the curves coincide. This method is also suited for the determination of the concentration of the daughters of other emanations. There are 2 figures and 5 references: 3 Soviet and 1 American.

SUBMITTED: January 9, 1960

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RUZER, L.S.

Calculation of inhaled radon doses. Atom.energ. 4 no.2:144-148 F '58.
(Radon--Physiological effect) (MIRA 11:4)

MILITARY APPLICATIONS: RADIATION MEDICINE

RUZER, L.S.

"Calculation of the Dose Due to Inhaled Radon," by L. S. Ruzer. Atomnaya Energiya, No 2, February 1958, pages 144-148.

Radon is inhaled under industrial as well as under natural conditions. The greatest portion of natural exposure to radiation is due to the inhaling of radon. A calculation of the dose of radon upon inhalation of radon is there of practical interest. The article gives an analytical expression for A (t) - the -ray activity of RaC during the inhalation of radon - and indicates a method of calculating the mean coefficient of retention of short-lived products of radon decay. A connection is established between the value of the integral absorption of the dose due to Rn, RaA, RaC' on the one hand, and A (t) on the other. Formulas are given for the calculation of the dose resulting from the long-lived radon decay products.

Bibliography of 9 titles.

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RUZER, L. S., CAND PHYS-MATH SCI, "DETERMINATION OF ABSORBED DOSAGES FROM INSTANCES OF HITS OF EMANATIONS AND THEIR DAUGHTER PRODUCTS IN ORGANISMS". MOSCOW, 1961. (MIN OF HIGHER AND SEC SPEC ED RSFSR. MOSCOW ENG PHYS INST). (KL, 2-61, 199).

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A051/A126

5.4600 (also 1273)

AUTHORS: Kuz'minskiy, A. S., Ruzer, L. S., Sunitsa, L. L.

TITLE: Apparatus with a source of γ-emission Co^{60}, of 16,000 g-equiv. radium for radiation-chemical investigations of synthetic and natural rubbers

TEXT: The Scientific Research Institute of the Rubber Industry (NIIRP) is at present engaged in a study of the effect of ionizing radiation on the properties of rubbers and rubber-like materials, in addition to work on the modification of various rubbers and their ingredients. A new apparatus with a $cobalt^{60}$ source, having a 10,000 curie (16,000 g-equiv. of radium) activity was put into operation at the institute in January 1959. It was based on the efforts of the Geneva 1958 International Conference for the Peaceful Utilization of Atomic Energy, and on papers presented by Soviet Scientists (Vol. 4, Moscow, 1959, p. 266). The apparatus (Fig. 1), installed in an underground building with concrete walls, is covered with a layer of hydroinsulating material on the outside, and tiles on the inside, concrete ceiling, 1.5 m thick, having an earth layer, 0.5 m thick. The emission chamber is separated from the labyrinth by a protective concrete rod, 1.25 m thick. The control panel is located in the control room to move by means of a hoisting mechanism the source from its storage position to a working position so that the

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Apparatus with a source of...

samples may be irradiated. The physico-chemical control desk is also located in the control room. The elevation of the container with the samples of the Co^{60} from its storage to a working position is accomplished with compressed air from the control panel through a flexible tube, directed to the float of the hoisting mechanism. The well containing the source is covered with a stainless steel top consisting of two halves with a groove in the middle. A table for the irradiation of the samples with a cylindrical protective container, is located over this top. The physico-chemical control desk contains the instruments for measuring the various parameters (temperature, pressure), characterizing the processes in the irradiated samples: electronic potentiometers ЭПП -09 (EPP-09), ЭПВ-01 (EPV-01). A video-receiving apparatus of the industrial television set ПТУ - ОМ (PTU-OM), with a transmission chamber located in the labyrinth is also located on the physico-chemical control desk. The energies of the emission dosages within the protective container and in the external part of the sample are measured by the ferrosulfate chemical dosimeter method. The average energy of the dose within the protective container, in a volume of 1 liter, is equal to 353 r/sec. In the external area of the sample, the dose energy varies from 180 to 20 r/sec. The blocking circuit opens the door of the chamber under the four following conditions: 1)

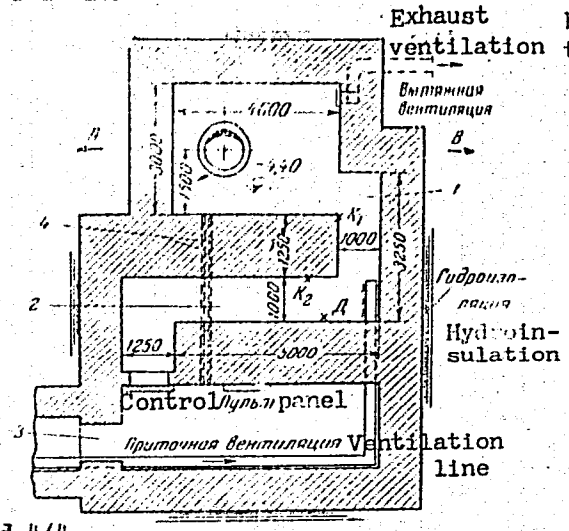
Apparatus with a source of...

the air is let out from the hoisting reservoir, 2) the electrical upper end switch of the transporting mechanism is shut off, 3) the lower end switch is turned on, 4) the level of emission in the labyrinth at the position of the "cactus" transmitter is less than 0.1 r/sec. The dosimetric instrument "cactus" has a sonic and light signalling system indicating the elevation of the given level of emission in the labyrinth. The described apparatus led to the development of the principles for radiation vulcanization of silicon, fluoro- and nitrile rubbers, as well as the commercial rubber products produced from the latter. Based on the results of the conducted radiation-chemical investigation a radiation vulcanization shop was designed. The mechanism of the radiation agent and the action of antirads in rubbers have been investigated to raise their radiation stability. There are 2 figures and 1 photograph.

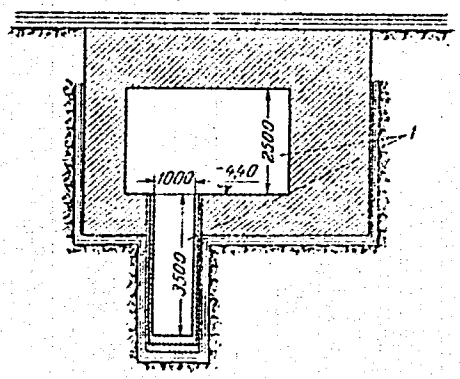
ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti (Scientific Research Institute of the Rubber Industry)

Apparatus with a source of...

Fig. 1. Plan and cross section of the underground building for the Co^{60} source. 1 - Emission chamber with a well for the storage of the radioactive Co; 2 - Labyrinth; 3 - Control room; 4 - Arch-type channels in the concrete cover.



Cross section of AB
Разрез по АВ



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